

**Criteria for determining the need for
Permits to Construct and Commence Operation
under the
Chemical Accident Prevention Program (CAPP)**

1. If a new facility proposes to use, store, produce or otherwise handle any tier A or tier B substance in excess of the listed threshold quantity, they will likely need to obtain permits from CAPP prior to construction and commencement of operation. (Refer to the table below for substances and threshold quantities.)
2. If a new facility proposes to manufacture explosives for sale in any quantity, they will likely need to obtain permits from CAPP prior to construction and commencement of operation. (Refer to the explosives definition below.)
3. If either criteria 1. or 2. above is met, contact CAPP for determination: Mark Zusy, P.E., CAPP Supervisor, (775) 687-9479, or e-mail: mzusy@ndep.nv.gov.
4. Mining facilities, transportation activities, and some LP Gas operations are exempt from these requirements.

Excerpts from:

**NEVADA REVISED STATUTES and
NEVADA ADMINISTRATIVE CODE**

NRS 459.3807_ “Explosive” defined. _“Explosive” means gunpowders, powders used for blasting, all forms of high explosives, blasting materials, fuses other than electric circuit breakers, detonators and other detonating agents, smokeless powders, other explosive or incendiary devices and any chemical compound, mechanical mixture or device that contains any oxidizing and combustible units, or other ingredients, in such proportions, quantities or packing that ignition by fire, friction, concussion, percussion, or detonation of the compound, mixture or device or any part thereof may cause an explosion. The term includes any mixture of ammonium nitrate and fuel oil. The term does not include any ammunition, powder, percussion caps, fuses, quills, matches, primers or explosive materials specified in 18 U.S.C. § 845(a)(4)-(6).

(Added to NRS by 1999, 1124)

NAC 459.9523 "C.A.S." defined. (NRS 459.3818, 459.3833) "C.A.S." means the Chemical Abstracts Service. (Added to NAC by Environmental Comm’n by R121-98, eff. 5-27-99)

Table of Substances

NAC 459.9533 Tabulated values for tier A threshold quantity, tier B threshold quantity, two release quantity and toxic endpoints. (NRS 459.3818, 459.3833)

1. Substances that are designated [~~in the table in this section~~] as having a tier A threshold quantity include, without limitation, the substances *and quantities* that are listed in NRS 459.3816 *and the substances listed in the table in this section*.

2. Substances that are designated in the table in this section as having a tier B threshold quantity include, without limitation, the substances that are listed in 40 C.F.R. § 68.130 3816 *and the substances listed in the table in this section*.

(Added to NAC by Environmental Comm'n by R121-98, eff. 5-27-99) **Reflects uncodified permanent amendment, effective October 25, 2001.**

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|----------------------|---|--|------------|------------------------------------|---------------------------------|
| Acetaldehyde | <i>Ethanal</i> | | 75-07-0 | 2,500 | 10,000 |
| Acetylene | Ethyne | | 74-86-2 | | 10,000 |
| Acrolein | 2-Propenol | | 107-02-8 | 150 | 5,000 |
| Acrylonitrile | 2-Propenenitrile | | 107-13-1 | | 20,000 |
| Acrylyl chloride | 2-Propenoyl chloride | | 814-68-6 | 250 | 5,000 |
| Alkylaluminums | | | | 5,000 | |
| Allyl alcohol | 2-Propen-1-ol | | 107-18-6 | | 15,000 |
| Allyl chloride | <i>3-chloropropene</i> | | 107-05-1 | 1,000 | |
| Allylamine | 2-Propen-1-amine | | 107-11-9 | [1,500] <i>1,000</i> | 10,000 |
| Ammonia | Anhydrous Ammonia | Anhydrous | 7664-41-7 | 5,000 | 10,000 |
| Ammonia | Ammonia solution <i>Ammonium Hydroxide</i> | 20wt% or greater | 7664-41-7 | | 20,000 |
| Ammonia | Ammonia solution <i>Ammonium hydroxide</i> | <i>concentration greater than 44% ammonia by weight [wt% or greater]</i> | 7664-41-7 | 10,000 | |
| Ammonium perchlorate | | | 7790-98-9 | 7,500 | |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|----------------------------------|----------------------------|---------------------|------------|---------------------------------|---------------------------------|
| Ammonium permanganate | | | 7787-36-2 | 7,500 | |
| Arsenous trichloride | | | 7784-34-1 | | 15,000 |
| Arsine | Arsenic Hydride | | 7784-42-1 | 100 | 1,000 |
| bis(Chloromethyl) Ether | Chloromethyl Ether | | 542-88-1 | 100 | 1,000 |
| Boron trichloride | | | 10294-34-5 | 2,500 | 5,000 |
| Boron trifluoride | | | 7637-07-2 | 250 | 5,000 |
| Boron trifluoride w/Methyl Ether | | 1:1 ratio | 353-42-4 | | 15,000 |
| Bromine | | | 7726-95-6 | 1,500 | 10,000 |
| Bromine chloride | | | 13863-41-7 | 1,500 | |
| Bromine pentafluoride | | | 7789-30-2 | 2,500 | |
| Bromine trifluoride | | | 7787-71-5 | 15,000 | |
| Bromotrifluoroethylene | | | 598-73-2 | | 10,000 |
| 1,3-Butadiene | | | 106-99-0 | | 10,000 |
| Butane | | | 106-97-8 | | 10,000 |
| 1-Butene | | | 106-98-9 | | 10,000 |
| 2-Butene | | | 107-01-7 | | 10,000 |
| Butene | | | 25167-67-3 | | 10,000 |
| 2-Butene-cis | | | 590-18-1 | | 10,000 |
| 2-Butene-trans | [2-Butene, (E)] | | 624-64-6 | | 10,000 |
| Butyl hydroperoxide (Tertiary) | | | 75-91-2 | 5,000 | |
| Butyl perbenzoate (Tertiary) | | | 614-45-9 | 7,500 | |
| Carbon disulfide | | | 75-15-0 | | 20,000 |
| Carbon oxysulfide | Carbon Oxide Sulfide | | 463-58-1 | | 10,000 |
| Carbonyl fluoride | | | 353-50-4 | 2,500 | |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|---------------------------------|--------------------------|---|------------|---------------------------------|---------------------------------|
| Cellulose nitrate | | <i>concentration greater than 12.6% nitrogen [or greater]</i> | 9004-70-0 | 2,500 | |
| Chlorine | | | 7782-50-5 | 1,500 | 2,500 |
| Chlorine dioxide | | | 10049-04-4 | 1,000 | 1,000 |
| Chlorine monoxide | | | 7791-21-1 | | 10,000 |
| Chlorine pentafluoride | | | 13637-63-3 | 1,000 | |
| Chlorine trifluoride | | | 7790-91-2 | 1,000 | |
| Chlorodiethylaluminum | Diethylaluminum Chloride | | 96-10-6 | 5,000 | |
| 1-Chloro-2,4-Dinitrobenzene | | | 97-00-7 | 5,000 | |
| Chloroform | | | 67-66-3 | | 20,000 |
| Chloromethyl methyl ether | | | 107-30-2 | 500 | 5,000 |
| Chloropicrin | | | 76-06-2 | 500 | |
| Chloropicrin/Methylbromide mix | | | | 1,500 | |
| Chloropicrin/Methylchloride mix | | | | 1,500 | |
| 1-Chloropropylene | | | 590-21-6 | | 10,000 |
| 2-Chloropropylene | | | 557-98-2 | | 10,000 |
| Crotonaldehyde | 2-Butenal | | 4170-30-3 | | 20,000 |
| Crotonaldehyde, (E)- | 2-Butenal, (E)- | | 123-73-9 | | 20,000 |
| Cumene Hydroperoxide | | | 80-15-9 | 5,000 | |
| Cyanogen | Ethanedinitrile | | 460-19-5 | 2,500 | 10,000 |
| Cyanogen chloride | | | 506-77-4 | 500 | 10,000 |
| Cyanuric fluoride | | | 675-14-9 | 100 | |
| Cyclohexylamine | Cyclohexanimine | | 108-91-8 | | 15,000 |
| Cyclopropane | | | 75-19-4 | | 10,000 |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|-------------------------------|-------------------------|---|----------------|---------------------------------|---------------------------------|
| Diacetyl peroxide | | <i>concentration greater than 70% [or greater]</i> | 110-22-5 | 5,000 | |
| Diazomethane | | | 334-88-3 | 500 | |
| Dibenzoyl peroxide | | | 94-36-0 | 7,500 | |
| Diborane | | | 19287-45-7 | 100 | 2,500 |
| Dibutyl peroxide (tertiary) | | | 110-05-4 | 5,000 | |
| Dichloro acetylene | | | 7572-29-4 | 250 | |
| Dichlorosilane | | | 4109-96-0 | 2,500 | 10,000 |
| Diethylzinc | | | 557-20-0 | 10,000 | |
| Difluoroethane | | | 75-37-6 | | 10,000 |
| Diisopropyl peroxydicarbonate | | | 105-64-6 | 7,500 | |
| Dilauroyl peroxide | | | 105-74-8 | 7,500 | |
| Dimethyl sulfide | | | 75-18-3 | 100 | |
| Dimethylamine (anhydrous) | | | 124-40-3 | 2,500 | 10,000 |
| Dimethyldichlorosilane | | | 75-78-5 | 1,000 | 5,000 |
| 1,1-Dimethylhydrazine | | | 57-14-7 | 1,000 | 15,000 |
| 2,2-Dimethylpropane | | | 463-82-1 | | 10,000 |
| <i>2,4 -Dinitroanaline</i> | | | <i>97-02-9</i> | <i>5,000</i> | |
| Epichlorohydrin | | | 106-89-8 | | 20,000 |
| Ethane | | | 74-84-0 | | 10,000 |
| Ethyl acetylene | 1-Butyne | | 107-00-6 | | 10,000 |
| Ethyl chloride | | | 75-00-3 | | 10,000 |
| Ethyl ether | | | 60-29-7 | | 10,000 |
| Ethyl mercaptan | Ethanethiol | | 75-08-1 | | 10,000 |
| Ethyl nitrite | | | 109-95-5 | 5,000 | 10,000 |
| Ethylamine | Ethanamine | | 75-04-7 | 7,500 | 10,000 |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|-----------------------|-------------------------|--|------------|----------------------------------|---------------------------------|
| Ethylene | Ethene | | 74-85-1 | | 10,000 |
| Ethylene fluorohydrin | | | 371-62-0 | 100 | |
| Ethylene oxide | Oxirane | | 75-21-8 | 5,000 | 10,000 |
| Ethylenediamine | | | 107-15-3 | | 20,000 |
| Ethyleneimine | Aziridine | | 151-56-4 | 1,000 | 10,000 |
| Fluorine | | | 7782-41-4 | [1,000] <i>100</i> | 1,000 |
| Formaldehyde | | [90% or greater] <i>concentration 37% or greater by weight</i> | 50-00-0 | 1,000 | 15,000 |
| Furan | | | 110-00-9 | 500 | 5,000 |
| Hexafluoroacetone | | | 684-16-2 | 5,000 | |
| Hydrazine | | | 302-01-2 | | 15,000 |
| Hydrochloric acid | | 37% or greater | 7647-01-0 | | 15,000 |
| Hydrofluoric acid | | 50% or greater | 7664-39-3 | | 1,000 |
| Hydrogen | | | 1333-74-0 | | 10,000 |
| Hydrogen bromide | | | 10035-10-6 | 5,000 | |
| Hydrogen chloride | | Anhydrous | 7647-01-0 | 5,000 | 5,000 |
| Hydrogen cyanide | Hydrocyanic acid | Anhydrous | 74-90-8 | 1,000 | 2,500 |
| Hydrogen fluoride | | Anhydrous | 7664-39-3 | 1,000 | |
| Hydrogen peroxide | | <i>concentration 52% or greater by weight</i> [wt% or greater] | 7722-84-1 | 7,500 | |
| Hydrogen selenide | | | 7783-07-5 | 150 | 500 |
| Hydrogen sulfide | | | 7783-06-4 | 1,500 | 10,000 |
| Hydroxylamine | | | 7803-49-8 | 2,500 | |
| Iron, pentacarbonyl | | | 13463-40-6 | 250 | 2,500 |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|---------------------------------|-------------------------------------|---|------------|---------------------------------|---------------------------------|
| Isobutane | <i>1,1-dimethyl ethane</i> | | 75-28-5 | | 10,000 |
| Isobutyronitrile | | | 78-82-0 | | 20,000 |
| Isopentane | | | 78-78-4 | | 10,000 |
| Isoprene | | | 78-79-5 | | 10,000 |
| Isopropyl chloride | <i>2-chloropropane</i> | | 75-29-6 | | 10,000 |
| Isopropyl chloroformate | | | 108-23-6 | | 15,000 |
| Isopropyl formate | | | 625-55-8 | 500 | |
| Isopropylamine | | | 75-31-0 | 5,000 | 10,000 |
| Ketene | | | 463-51-4 | 100 | |
| Methacrylaldehyde | | | 78-85-3 | 1,000 | |
| Methacryloyl chloride | | | 920-46-7 | 150 | |
| Methacryloyloxyethyl isocyanate | | | 30674-80-7 | 100 | |
| Methane | | | 74-82-8 | | 10,000 |
| Methyl acrylonitrile | Methacrylonitrile | | 126-98-7 | 250 | 10,000 |
| Methyl bromide | | | 74-83-9 | 2,500 | |
| 3-Methyl-1-butene | <i>Isopentene</i> | | 563-45-1 | | 10,000 |
| 2-Methyl-1-butene | | | 563-46-2 | | 10,000 |
| Methyl chloride | | | 74-87-3 | 15,000 | 10,000 |
| Methyl chloroformate | | | 79-22-1 | 500 | 5,000 |
| Methyl disulfide | | | 624-92-0 | 100 | |
| Methyl ether | | | 115-10-6 | | 10,000 |
| Methyl ethyl ketone peroxide | <i>Ethyl methyl ketone peroxide</i> | <i>concentration greater than 60% [or greater]</i> | 1338-23-4 | 5,000 | |
| Methyl fluoroacetate | | | 453-18-9 | 100 | |
| Methyl fluorosulfate | | | 421-20-5 | 100 | |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|-----------------------|-------------------------|---|------------|---------------------------------|---------------------------------|
| Methyl formate | | | 107-31-3 | | 10,000 |
| Methyl hydrazine | | | 60-34-4 | 100 | 15,000 |
| Methyl iodide | | | 74-88-4 | 7,500 | |
| Methyl isocyanate | | | 624-83-9 | 250 | 10,000 |
| Methyl mercaptan | | | 74-93-1 | 5,000 | 10,000 |
| Methyl thiocyanate | | | 556-64-9 | | 20,000 |
| Methyl vinyl ketone | | | 78-94-4 | 100 | |
| Methylamine | Methanamine | Anhydrous | 74-89-5 | 1,000 | 10,000 |
| 2-Methylpropene | | | 115-11-7 | | 10,000 |
| Methyltrichlorosilane | | | 75-79-6 | 500 | 5,000 |
| Nickel carbonyl | | | 13463-39-3 | 150 | 1,000 |
| Nitric acid | | 80% or greater | 7697-37-2 | | 15,000 |
| Nitric acid | | <i>concentration</i> 94.5% <i>or</i> <i>greater by</i> <i>weight</i> [wt% or greater] | 7697-37-2 | 500 | |
| Nitric oxide | Nitrogen oxide | | 10102-43-9 | 250 | 10,000 |
| Nitroaniline | para Nitroaniline | | 100-01-6 | 5,000 | |
| Nitrogen dioxide | | | 10102-44-0 | 250 | |
| Nitrogen oxides | | NO; NO ₂ ; N ₂ O ₄ ; N ₂ O ₃ | 10102-44-0 | 250 | |
| Nitrogen tetroxide | | | 10544-72-6 | 250 | |
| Nitrogen trifluoride | | | 7783-54-2 | 5,000 | |
| Nitrogen trioxide | | | 10544-73-7 | 250 | |
| Nitromethane | | | 75-52-5 | 2,500 | |
| Oleum | Fuming sulfuric acid | 65 wt% or greater of SO ₃ | 8014-95-7 | 1,000 | 10,000 |
| Osmium tetroxide | | | 20816-12-0 | 100 | |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|---------------------------|-------------------------|--|------------|------------------------------------|---------------------------------|
| Oxygen difluoride | Fluorine monoxide | | 7783-41-7 | 100 | |
| Ozone | | | 10028-15-6 | 100 | |
| Pentaborane | | | 19624-22-7 | 100 | |
| 1,3-Pentadinene | | | 504-60-9 | | 10,000 |
| Pentane | | | 109-66-0 | | 10,000 |
| 1-Pentene | | | 109-67-1 | | 10,000 |
| 2-Pentene, (E)- | | | 646-04-8 | | 10,000 |
| 2-Pentene, (Z)- | | | 627-20-3 | | 10,000 |
| Peracetic acid | Peroxyacetic acid | <i>concentration greater than 60% acetic acid</i> | 79-21-0 | [5,000] <i>1,000</i> | 10,000 |
| Perchloric acid | | <i>concentration greater than 60% by weight [or greater]</i> | 7601-90-3 | 5,000 | |
| Perchloromethyl mercaptan | | | 594-42-3 | 150 | 10,000 |
| Perchloryl fluoride | | | 7616-94-6 | 5,000 | |
| Phosgene | Carbonyl chloride | | 75-44-5 | 100 | 500 |
| Phosphine | Hydrogen phosphide | | 7803-51-2 | 100 | 5,000 |
| Phosphorus oxychloride | Phosphoryl chloride | | 10025-87-3 | 1,000 | 5,000 |
| Phosphorus trichloride | | | 7719-12-2 | 1,000 | 15,000 |
| Piperidine | | | 110-89-4 | | 15,000 |
| Propadiene | 1,2 Propadiene | | 463-49-0 | | 10,000 |
| Propane | | | 74-98-6 | | 10,000 |
| Propargyl bromide | <i>3-Bromopropyne</i> | | 106-96-7 | [7,500] <i>100</i> | |
| Propionitrile | | | 107-12-0 | | 10,000 |
| Propyl chloroformate | | | 109-61-5 | | 15,000 |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|--------------------------|-------------------------|---------------------|------------|---------------------------------|---------------------------------|
| Propyl nitrate | | | 627-13-4 | [2,500] 100 | |
| Propylene | 1 Propene | | 115-07-1 | | 10,000 |
| Propylene oxide | | | 75-56-9 | | 10,000 |
| Propyleneimine | | | 75-55-8 | | 10,000 |
| Propyne | 1-Propyne | | 74-99-7 | | 10,000 |
| Sarin | | | 107-44-8 | 100 | |
| Selenium hexafluoride | | | 7783-79-1 | 1,000 | |
| Silane | | | 7803-62-5 | | 10,000 |
| Stibine | Antimony hydride | | 7803-52-3 | 500 | |
| Sulfur dioxide | | Anhydrous | 7446-09-5 | 1,000 | 5,000 |
| Sulfur pentafluoride | | | 5714-22-7 | 250 | |
| Sulfur tetrafluoride | | | 7783-60-0 | 250 | 2,500 |
| Sulfur trioxide | Sulfuric Anhydride | | 7446-11-9 | 1,000 | 10,000 |
| Tellurium hexafluoride | | | 7783-80-4 | 250 | |
| Tetrafluoroethylene | | | 116-14-3 | 5,000 | 10,000 |
| Tetrafluorohydrazine | | | 10036-47-2 | 5,000 | |
| Tetramethyl Lead | | | 75-74-1 | [7,500] 1,000 | 10,000 |
| Tetramethylsilane | | | 75-76-3 | | 10,000 |
| Tetranitromethane | | | 509-14-8 | | 10,000 |
| Thionyl chloride | | | 7719-09-7 | 250 | |
| Titanium tetrachloride | | | 7550-45-0 | 2,500 | 2,500 |
| Toluene 2,4-diisocyanate | | | 584-84-9 | | 10,000 |
| Toluene 2,6-diisocyanate | | | 91-08-7 | | 10,000 |
| Toluene diisocyanate | | | 26471-62-5 | | 10,000 |

| Chemical Name | Alternate Chemical Name | Mixture Description | CAS Number | Tier A Threshold Quantity (lbs) | Tier B Threshold Quantity (lbs) |
|----------------------------------|-------------------------|---------------------|------------|---------------------------------|---------------------------------|
| Trichloro(chloromethyl) silane | | | 1558-25-4 | 100 | |
| Trichloro(dichlorophenyl) silane | | | 27137-85-5 | 2,500 | |
| Trichlorosilane | | | 10025-78-2 | 5,000 | 10,000 |
| Trifluorochloroethylene | | | 79-38-9 | 10,000 | 10,000 |
| Trimethoxysilane | | | 2487-90-3 | 1,500 | |
| Trimethylamine | | | 75-50-3 | | 10,000 |
| Trimethylchlorosilane | | | 75-77-4 | | 10,000 |
| Vinyl acetate monomer | | | 108-05-4 | | 15,000 |
| Vinyl acetylene | | | 689-97-4 | | 10,000 |
| Vinyl chloride | | | 75-01-4 | | 10,000 |
| Vinyl ethyl ether | | | 109-92-2 | | 10,000 |
| Vinyl fluoride | | | 75-02-5 | | 10,000 |
| Vinyl methyl ether | | | 107-25-5 | | 10,000 |
| Vinylidene chloride | | | 75-35-4 | | 10,000 |
| Vinylidene fluoride | | | 75-38-7 | | 10,000 |